

THE BRAITHWAITE BURN & JESSOP CONSTRUCTION COMPANY LIMITED

eNIT/DGM(P-V)/BEARING/MANIPUR/R3/7-2017/Corrigendum

Date: 18.02.2017

(A Government of India Enterprise)  
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E-MAIL: ; [info@bbjconst.com](mailto:info@bbjconst.com), [bbjproj@vsnl.net](mailto:bbjproj@vsnl.net)  
website: [www.bbjconst.com](http://www.bbjconst.com)

**CORRIGENDUM-1**

**TENDER ID: 2017\_BBJC\_173023\_1**

**REF: eNIT/DGM(P-V)/BEARING/MANIPUR/R3/7-2017 Dt. 07.02.2017**

**SUB:** DESIGN, PREPARATION OF DRAWING, APPROVAL FROM RAILWAY OR THEIR AUTHORISED REPRESENTATIVE, SUPPLYING, MANUFACTURING, PAINTING AND TRANSPORTING OF SPHERICAL BEARINGS INCLUDING ANCHOR PLATES & BOLTS AS PER APPROVED DRAWINGS. TRANSPORTATION TO THE DESTINATION (MENTIONED IN BOQ-1) AS PER THE INSTRUCTION OF BBJ.

**ALTERATION TO OUR ABOVE REFERRED eNIT DATED 07.02.2017 IS AS FOLLOWS:**

- A. Annexure-1 as available with is hereby revised and shall be read as "**Revised Annexure – 1**" as attached along with this Corrigendum-1.
- B. Load Data of 28.5M Span for Bridge No. 164 is attached herewith at **Annexure-2**.
- C. Related BBJ's drawings required for design and manufacturing bearings for Manipur project – Bridge No. 130 & 164 as attached at **Annexure-3**;

All other terms & conditions of the above mentioned in NIT will remain unchanged.

THIS CORRIGENDUM WILL BE TREATED AS PART OF THE MAIN TENDER DOCUMENT AND MUST BE SUBMITTED WITH THE TENDER DULY SIGNED AND SEALED BY THE AUTHORIZED SIGNATORY.

**(A. NEOGI)**  
**DGM(P-V)**

**Revised Annexure - 1**

**NIT NO. - eNIT/DGM (P-V)/BEARING/MANIPUR/R3/7-2017 Dt. 07.02.2017**

Bridge No.	Type of group	Span	Type of bearing	V <sub>max</sub> (MT)	V <sub>min</sub> (MT)	H <sub>L</sub> (MT)	H <sub>T</sub> (MT)	Load condition	Maximum longitudinal movement
164 and 130	A	103.5M	Fixed	1300			429	Trans Seismic	
					-261		286		
				728		866		Long Seismic	
					130	825			
			Free	1300			429	Trans Seismic	
					-261		286		
				728				Long Seismic	
					130				
164	B	69.0M	Fixed	1052			381	Trans Seismic	
					-284		250		
				527		516		Long Seismic	
					57	484			
			Free	1052			381	Trans Seismic	
					-284		250		
				527				Long Seismic	
					57				
130	C	69.0M	Fixed	739			221	Trans Seismic	
					-98		145		
				470		417		Long Seismic	
					90	386			
			Free	739			221	Trans Seismic	
					-98		145		
				470				Long Seismic	
					90				

STUP Consultants Pvt. Ltd



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E-mail : kolkata@stupmail.com  
Web Site : www.stupco.com

OFFICE OF ORIGIN

**KOLKATA**

OWNER CLIENT

**NORTHEAST FRONTIER RAILWAY**

CONTRACTOR CLIENT

PROJECT

**PROPOSED BRIDGE NO. 164 ( AT Km 86/996 ) BETWEEN KHONGSONG  
AND NONEY UNDER NEW BG RAIL LINE CONSTRUCTION BETWEEN  
JIRIBAM & TUPUL (IMPHAL)**

TITLE

**BEARING LOAD DATA OF 30 M SPAN - Br. No. 164**

DATE	REV. NO.	MODIFICATION / PURPOSE OF ISSUE	SHEET NOS / ANNEXURES	PREPARED		CHECKED		APPROVED	
				INITIALS	SIGNATURE	INITIALS	SIGNATURE	INITIALS	SIGNATURE
17.02.17	R0	FOR APPROVAL		PMD		SSG		SSG	

DATE

17/02/17

SHEETS

(1 + )

= Pgs

NOTE NO.

9293/E/DN-164-110  
(R0)

APPROVED

**CHIEF MANAGER  
(DESIGN)**

This note is the property of STUP Consultants P. Ltd. It should not be used, copied or reproduced without their written permission

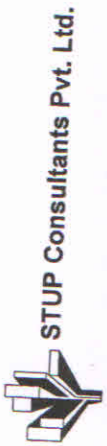
Date: 15-10-2012  
 By: PMD  
 Note No.  
 Sheet No.



STUP Consultants Pvt. Ltd.

Bearing Load Details : Br.No. 164 (30 m span)

SI No.	Bearing Type	Load Condition	Coexisting Loads , Forces, Movements and Rotation Data												Qty (Nos)
			Vertical Load (T)			Horizontal Force (T)				Rotation (Rad)		Movement (mm)			
			Case	Magnitude	Case	Longitudinal Magnitude	Case	Transverse Magnitude	Case	Magnitude	Longitudinal	Transverse	Case	Magnitude	
1	2	3	4	5	6	7	8	9	10	11	12	13	14		
		Permanent													
		Normal	Maximum (DL+LL)	151	Co-existing (Braking Force)	33	Co-existing	-	Co-existing	0.0059	-	-	-		
			Minimum (DL)	87	Co-existing	-	Co-existing	-	Co-existing	0.0042	-	-	-		
		Long Seismic	Maximum (DL+ 50% LL)	205	Co-existing (Braking Force & Seismic on DL)	233	Co-existing	-	Co-existing	0.0059	-	-	-		
			Minimum (DL)	44	Co-existing (Seismic on DL)	217	Co-existing	-	Co-existing	0.0042	-	-	-		
1	Fixed Bearing	Trans Seismic	Maximum (DL+ 50% LL)	449	Co-existing	-	Co-existing (Seismic on 50% LL & Seismic on DL)	147	Co-existing	0.0176	-	-	-	3	
			Minimum (DL)	-143	Co-existing	-	Co-existing (Seismic on DL)	124	Co-existing	-0.0056	-	-	-		



**STUP Consultants Pvt. Ltd.**

Date: 15-10-2012

Note No.

By: PMD

Sheet No.

Bearing Load Details : Br.No. 164 (30 m span)

SI No.	Bearing Type	Load Condition	Coexisting Loads , Forces, Movements and Rotation Data												Qty (Nos)
			Vertical Load (T)			Horizontal Force (T)			Rotation (Rad)			Movement (mm)			
			Case	Magnitude	Case	Longitudinal Magnitude	Case	Transverse Magnitude	Case	Magnitude	Longitudinal	Transverse			
1	2	3	4	5	6	7	8	9	10	11	12	13	14		
		Permanent													
		Normal	Maximum (DL+LL)	151	Co-existing (Braking Force)	-	Co-existing	-	Co-existing	0.0059	16.8	-	-		
			Minimum (DL)	87	Co-existing	-	Co-existing	-	Co-existing	0.0042	-8.0	-	-		
		Long Seismic	Maximum (DL+ 50% LL)	205	Co-existing (Braking Force & Seismic on DL)	-	Co-existing	-	Co-existing	0.0059	25.8	-	-		
			Minimum (DL)	44	Co-existing (Seismic on DL)	-	Co-existing	-	Co-existing	0.0042	-17.0	-	-		
2	Slideing-Guided Bearing	Trans Seismic	Maximum (DL+ 50% LL)	449	Co-existing	-	Co-existing (Seismic on 50% LL & Seismic on DL)	147	Co-existing	0.0176	50.0	-	-	3	
			Minimum (DL)	-143	Co-existing	-	Co-existing (Seismic on DL)	124	Co-existing	-0.0056	-50.0	-	-		



THE BRAITHWAITE BURN & JESSOP CONSTRUCTION COMPANY LIMITED

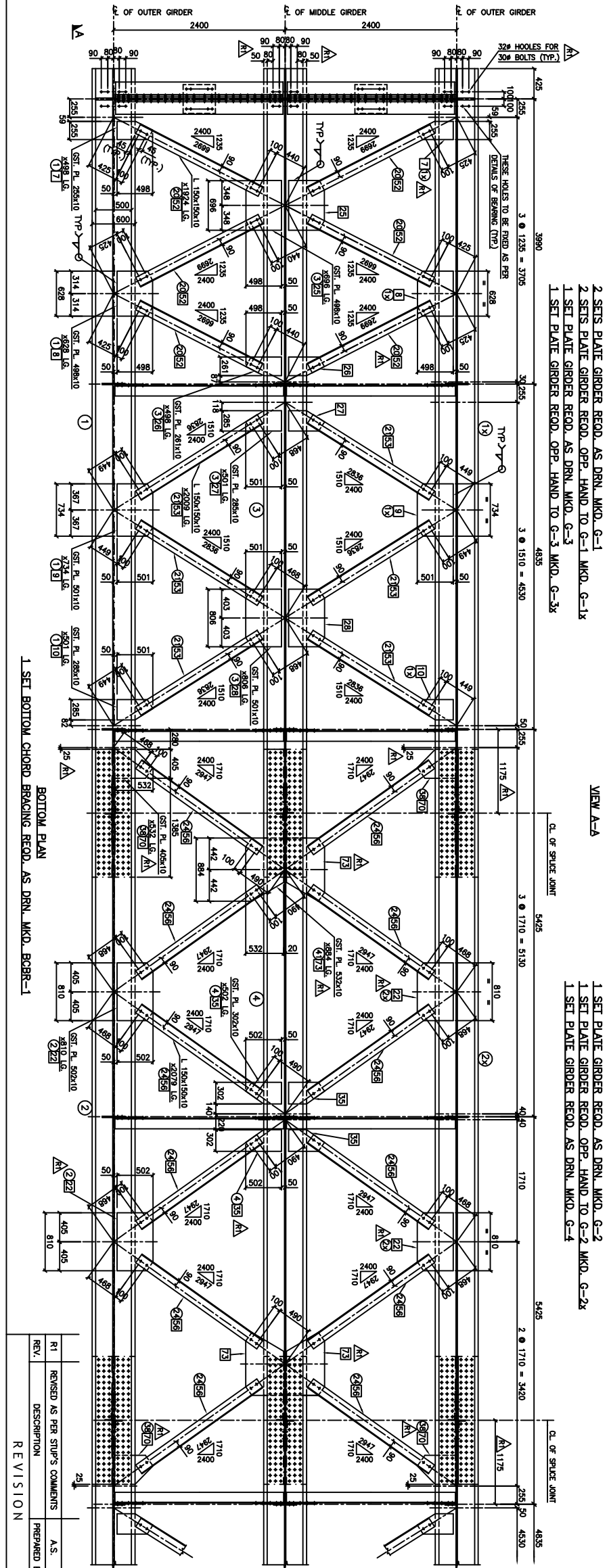
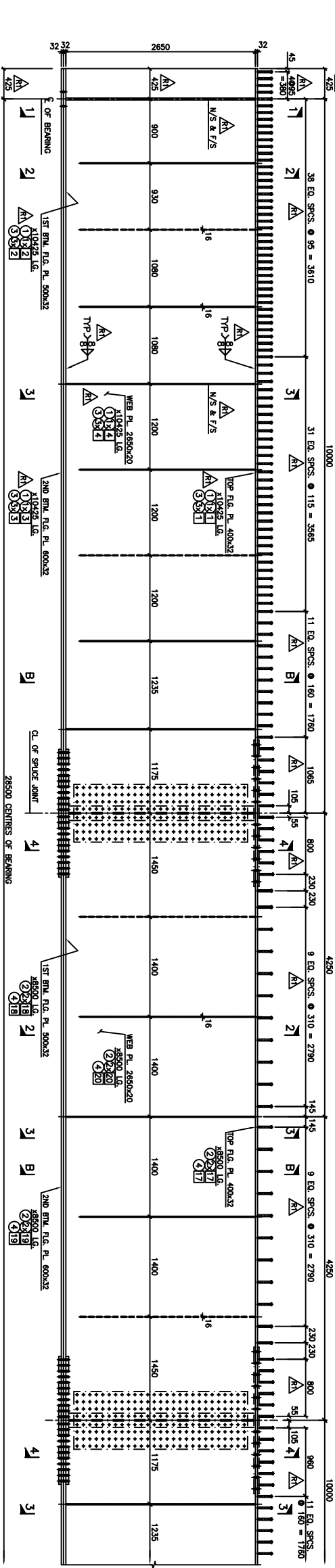
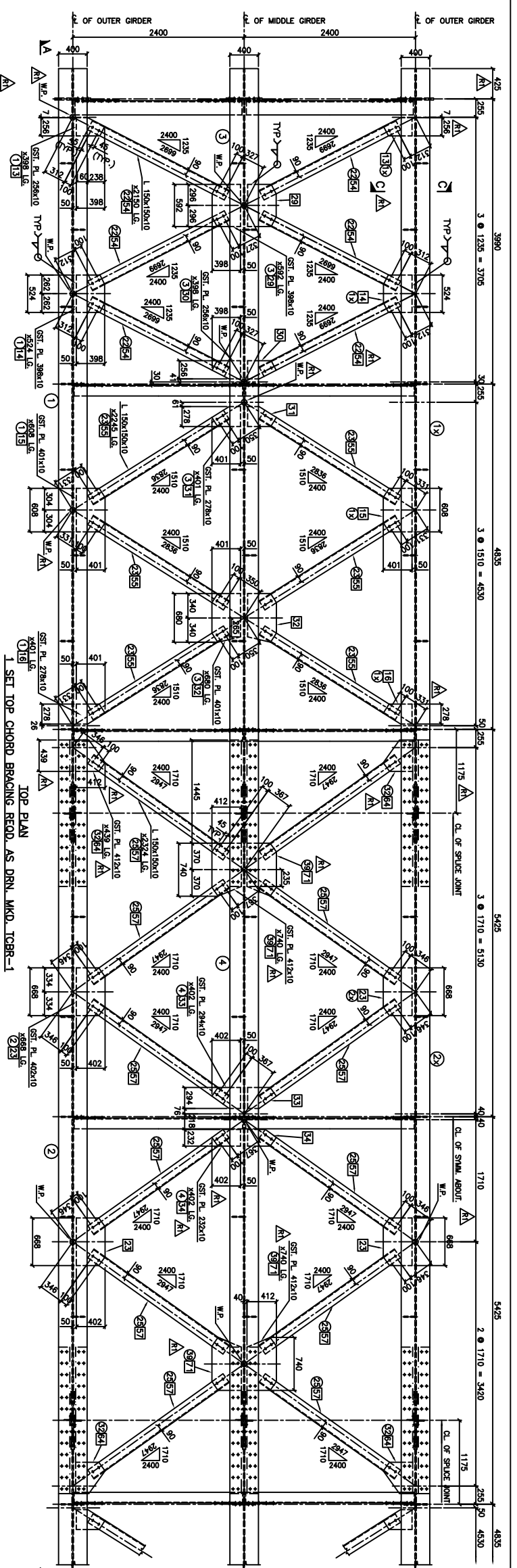
eNIT/DGM(P-V)/BEARING/MANIPUR/R3/7-2017/Corrigendum

Date: 18.02.2017

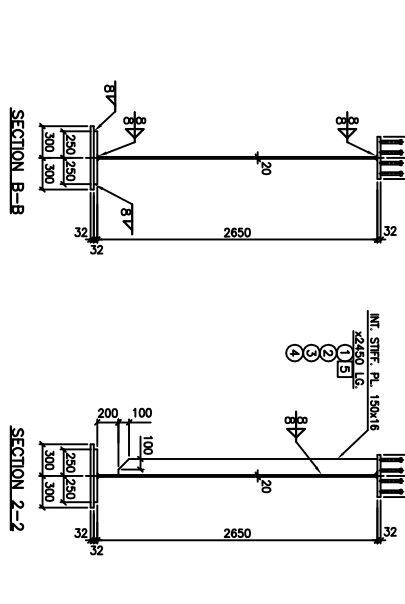
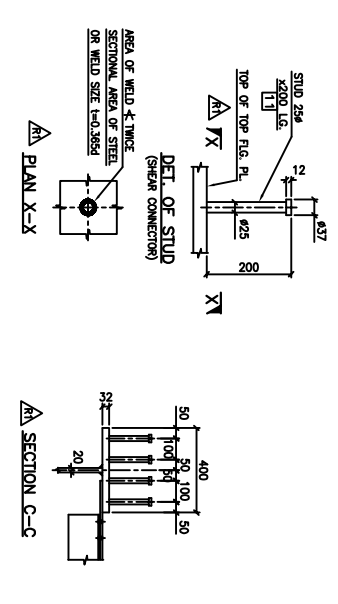
**Annexure-3**

Related BBJ's drawings required for design and manufacturing bearings for Manipur project – Bridge No. 130 & 164

<b>Sl. No.</b>	<b>Span</b>	<b>Drawing No.</b>	<b>Revision</b>
A	103.5M		
1		2140/103.5M/FAB-04	B
2		2140/103.5M/FAB-55	A
B	69.0M		
1		2140/103.5M/FAB-17	A
2		2140/103.5M/FAB-18	B
C	28.5M	2140/28.5M/FAB-02	1



FOR BRAND 104	
ASG/C/MP/HL	D/CE/CON-B/MP/HL
E/CON/DWG/MP/HL	E/CON/MP/HL



**NOTES -**

- ALL DIMENSIONS ARE IN MM, UNLESS OTHERWISE NOTED.
- THE DESIGN IS IN ACCORDANCE WITH THE BRIDGE RULES, STEEL BRIDGE CODE, WELDED BRIDGE CODE.
- CONCRETE SUB-WELDED ARC WELDING SHOULD BE EMPLOYED FOR FLUET WELDS IN FLANGES TO WEB, OTHER WELDS ALSO TO BE MADE BY SUB-WELDED ARC WELDING PROCEDURE AND BY QUALIFIED WELDERS.
- ALL WELDS TO BE MADE BY USING APPROVED WELDING PROCEDURES AND BY QUALIFIED WELDERS.
- ALL FIELD RIVET HOLES ARE 23.5 DIA. FOR 22 DIA. RIVETS & SHOWN THIS  $\phi$  EXCEPT WHERE OTHERWISE SHOWN.
- ALL MATERIALS ARE AS PER IS:2002-2011, E250/B0 (QUALITY).
- STUD SHEAR CONNECTORS SHOULD BE WELDED TO TOP FLANGE COVER PLATE AFTER FLANGE SPLICER CONNECTION.
- ALL WELDERS SHALL BE SHIP WELDED, FILET WELD ARE BIRM, TRK, UNLESS OTHERWISE NOTED.
- ALL INTERMEDIATE STIFFENERS SHOULD BE WELDED TO THE FLANGE AND WEB.
- ALL INTERMEDIATE STIFFENERS SHOULD BE WELDED TO THE WEB AND NOT WELDED TO FLANGE.
- THE DATE OF TESTING OF STUD SHEAR CONNECTION REFER BRJ'S DRN. NO. - 5272/E/05-3-300 & 501.
- ALL DIMENSIONS ARE TO BE CHECKED AND VERIFIED BY ACTUAL LABOUR.
- THIS DRG. IS PREPARED BASED ON STUD SHEAR CONNECTION REFER BRJ'S DRN. NO. 2140/28.5m/7m-01 REV.-1
- THE NOTE FOR TESTING OF STUD SHEAR CONNECTION REFER BRJ'S DRN. NO. 2140/28.5m/7m-03 & 04 REV.-1
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH REFER BRJ'S DRN. NO. 2140/28.5m/7m-03 & 04 REV.-1

**CLIENT :-** N. F. RAILWAY

**CONTRACTOR :-** THE BRAITHWAITE BURN AND JESSOP CONSTRUCTION CO. LTD. (A GOVT. OF INDIA ENTERPRISE)

**PROJECT :-** BRIDGE NO. - 164 (AT KM. 86/996) BETWEEN KHONGSANG AND NONEY UNDER NEW BG RAIL LINE CONSTRUCTION BETWEEN JIRBAM AND TUPUL (IMPHAL)

**STANDARD OF LOADING -** BG- 25T OF 2008

**DETAIL DRG. BY** BBJ

**FABRICATED BY** BBJ

**TITLE :-** DETAILS OF PLATE GIRDER AND TOP & BTM. CHORD BRG. MKD. - G-1, 1x, G-2, 2x, G-3, 3x, G-4, AND TOBR-1 & BCBR-1

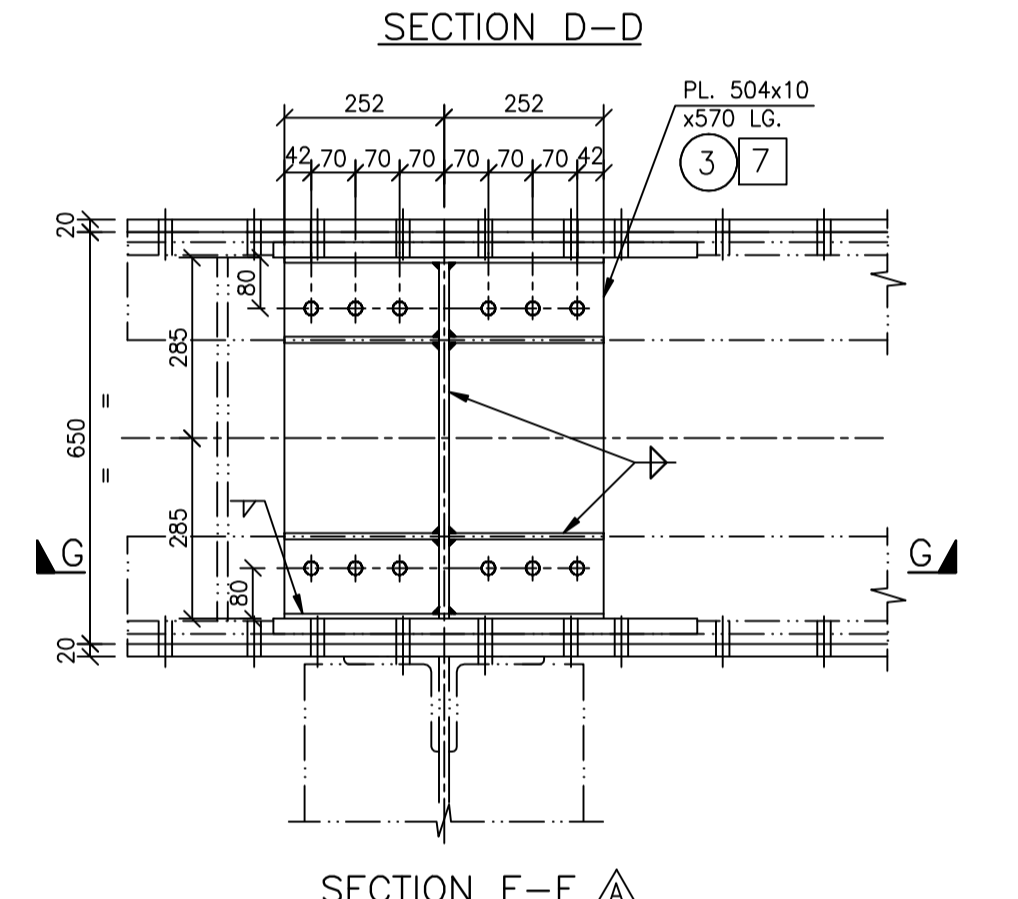
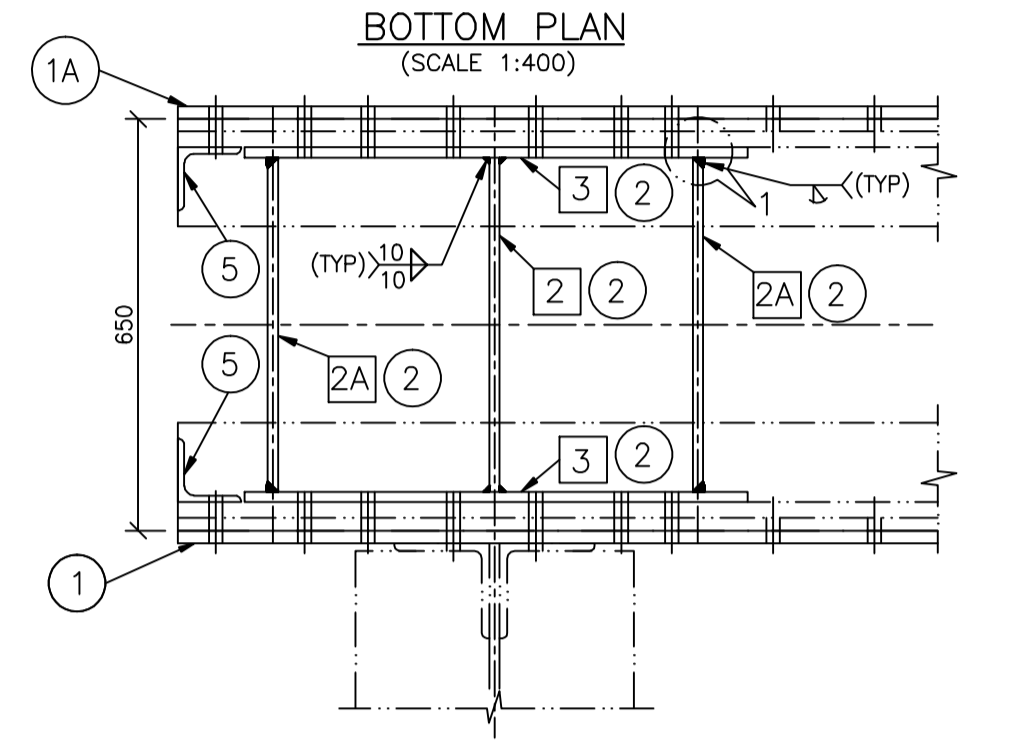
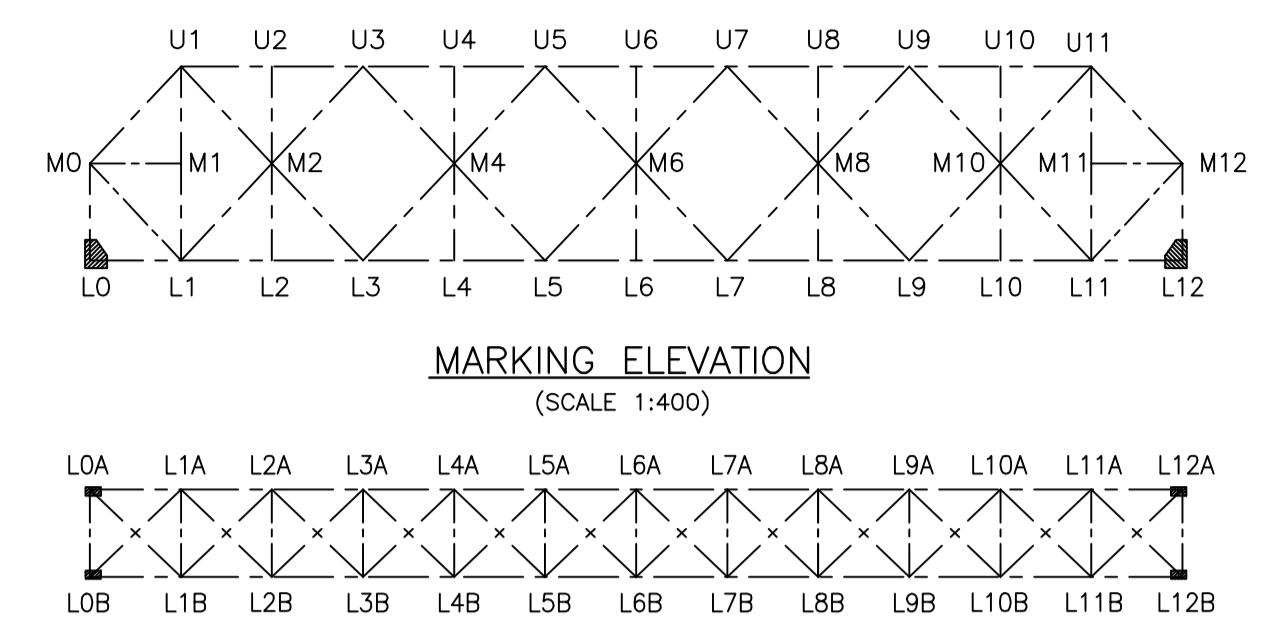
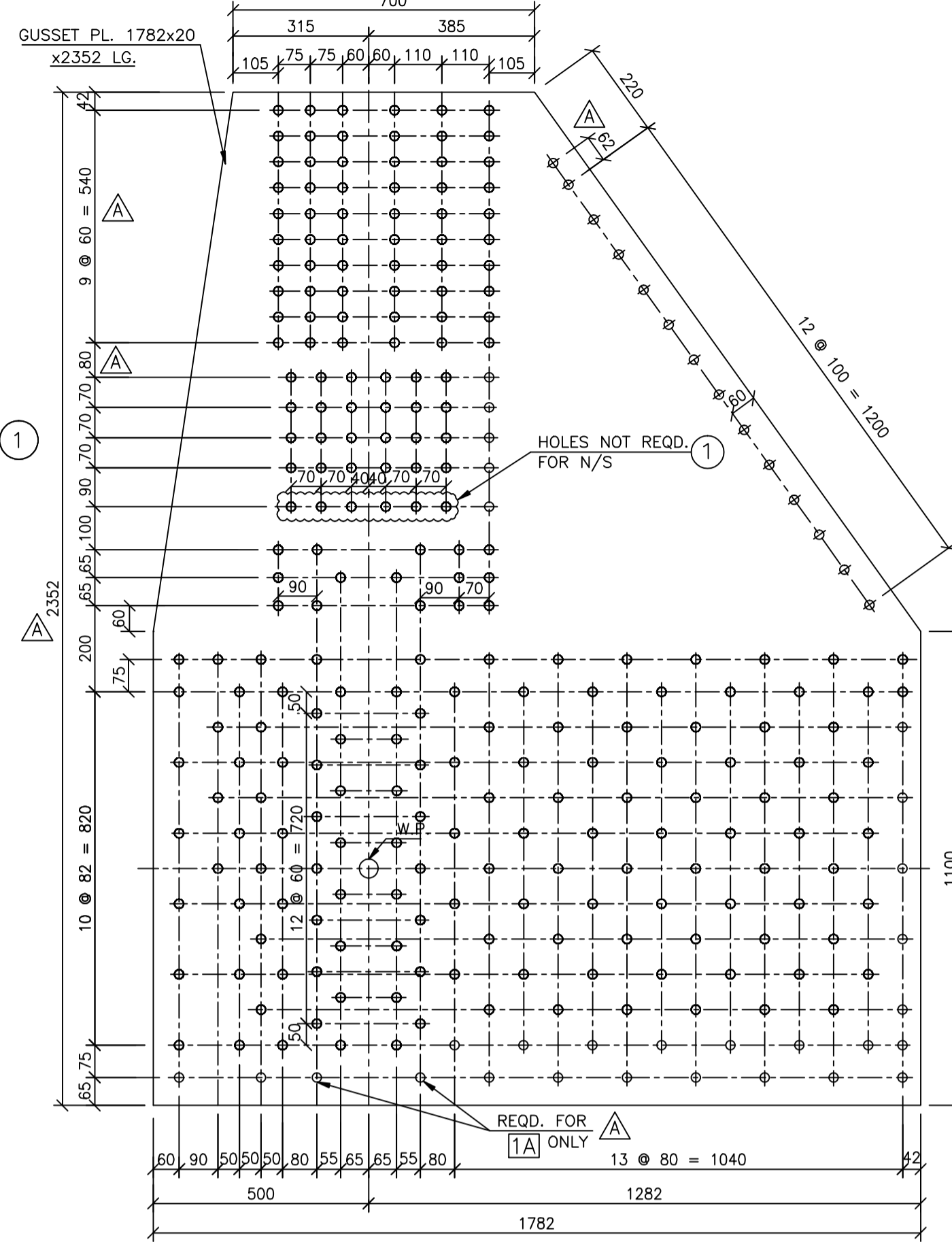
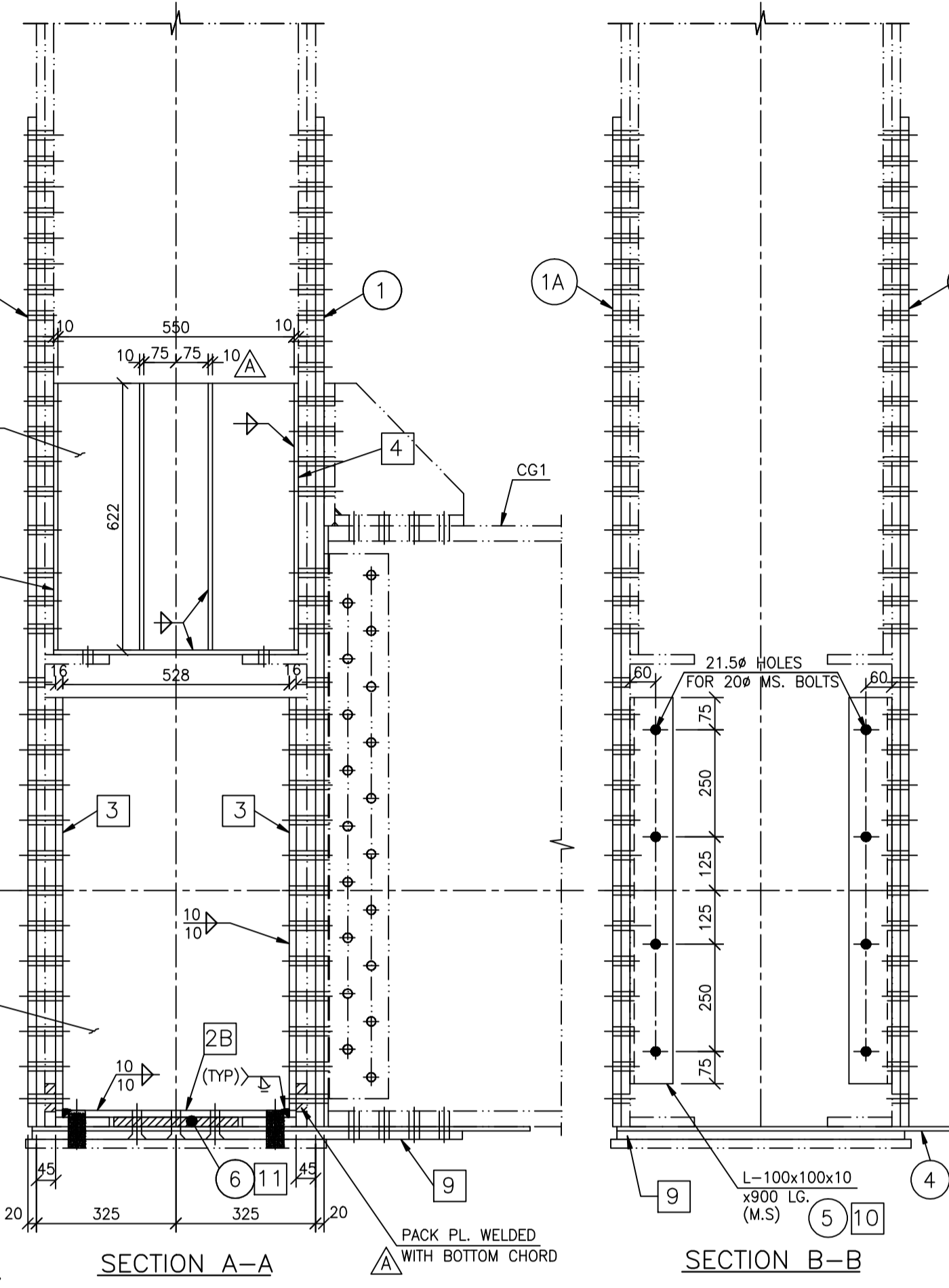
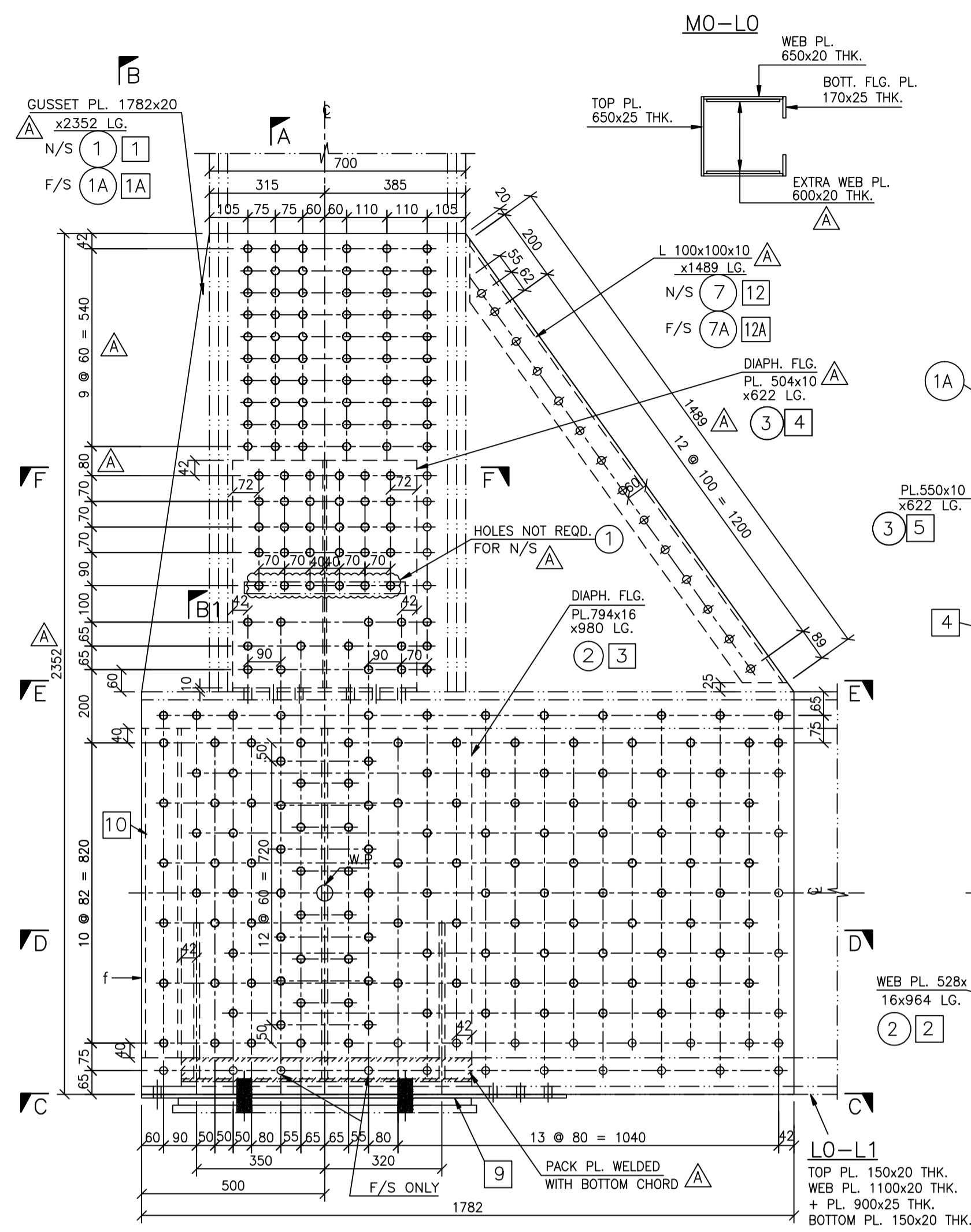
**DRN. BY,** K.M. BBJ'S ORDER NO.- 2140

**CHECK. BY,** R.K. SCALE :- 1:30 & 1:400

**APPVD. BY,** A.S. BBJ'S DRG. NO. 2140/28.5m/FAB-02

**REVISION**

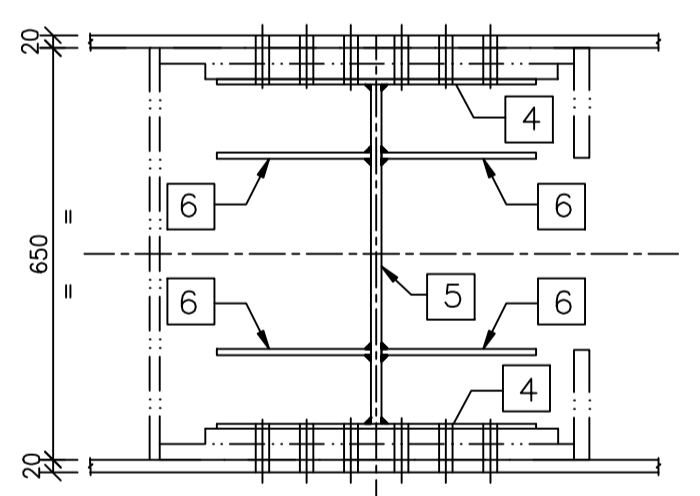
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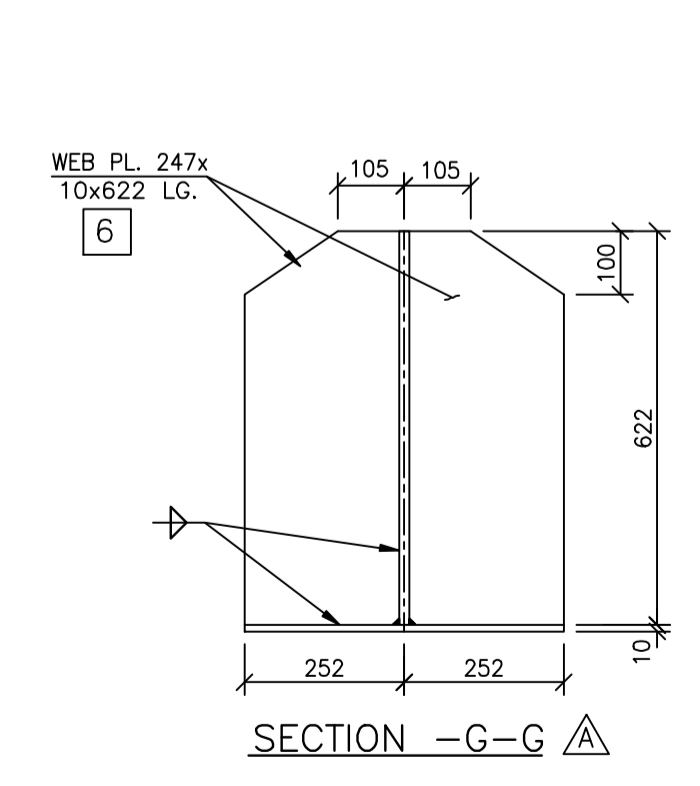
DET. OF ITEM MARK 1 & 1A

FOR BR.NO 164	FOR BR.NO 130
AXEN/C/IMPHAL	DY.CE/CON-III/IMPHAL
JE/CON/DRG/IMPHAL	JE/CON/IMPHAL
AXN/C/JRBM	DY.CE/CON-III/JRBM
JE/CON/DRG/JRBM	JE/CON/JRBM

THIS DRAWING IS ALSO VALID FOR BRIDGE NO 130 (AT KM 69/885) OVER RIVER IRANG

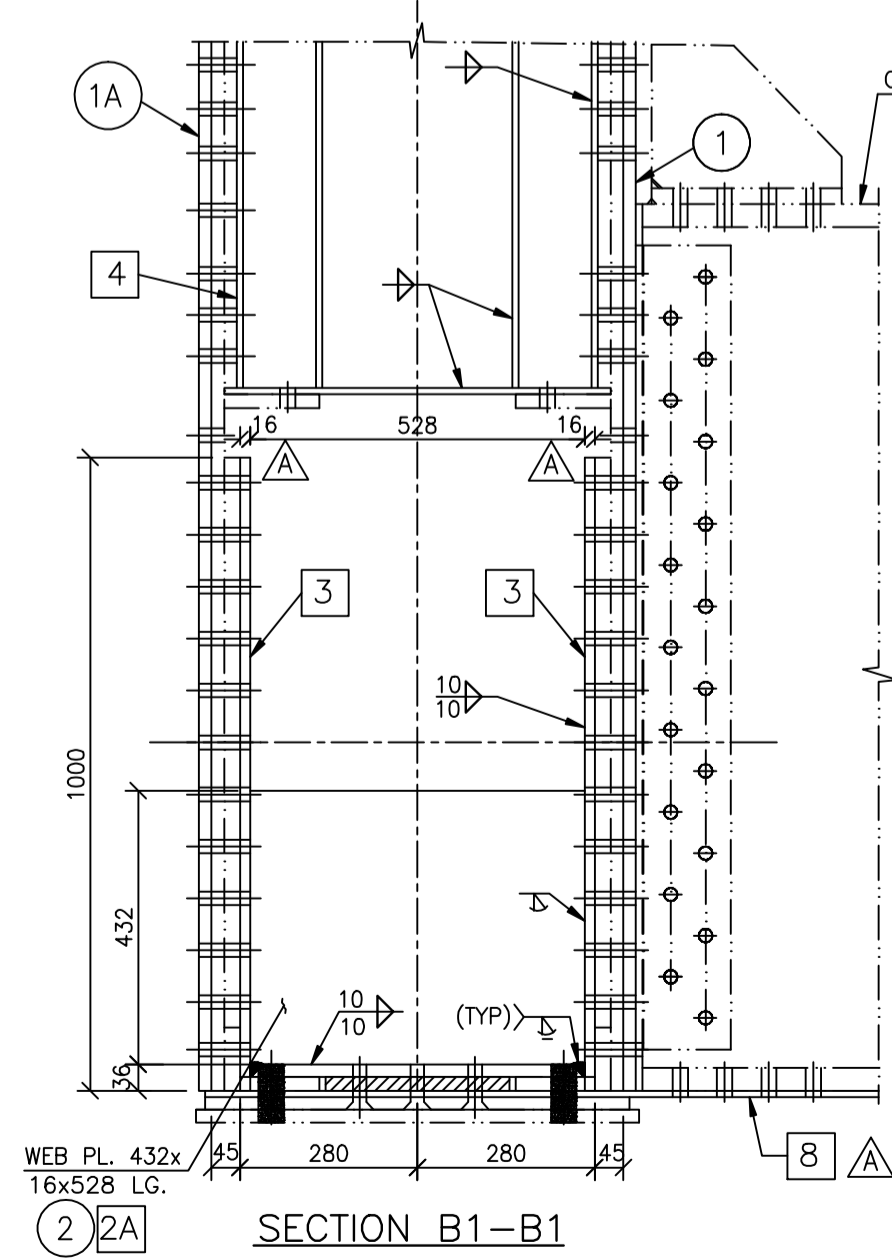


SECTION F-F

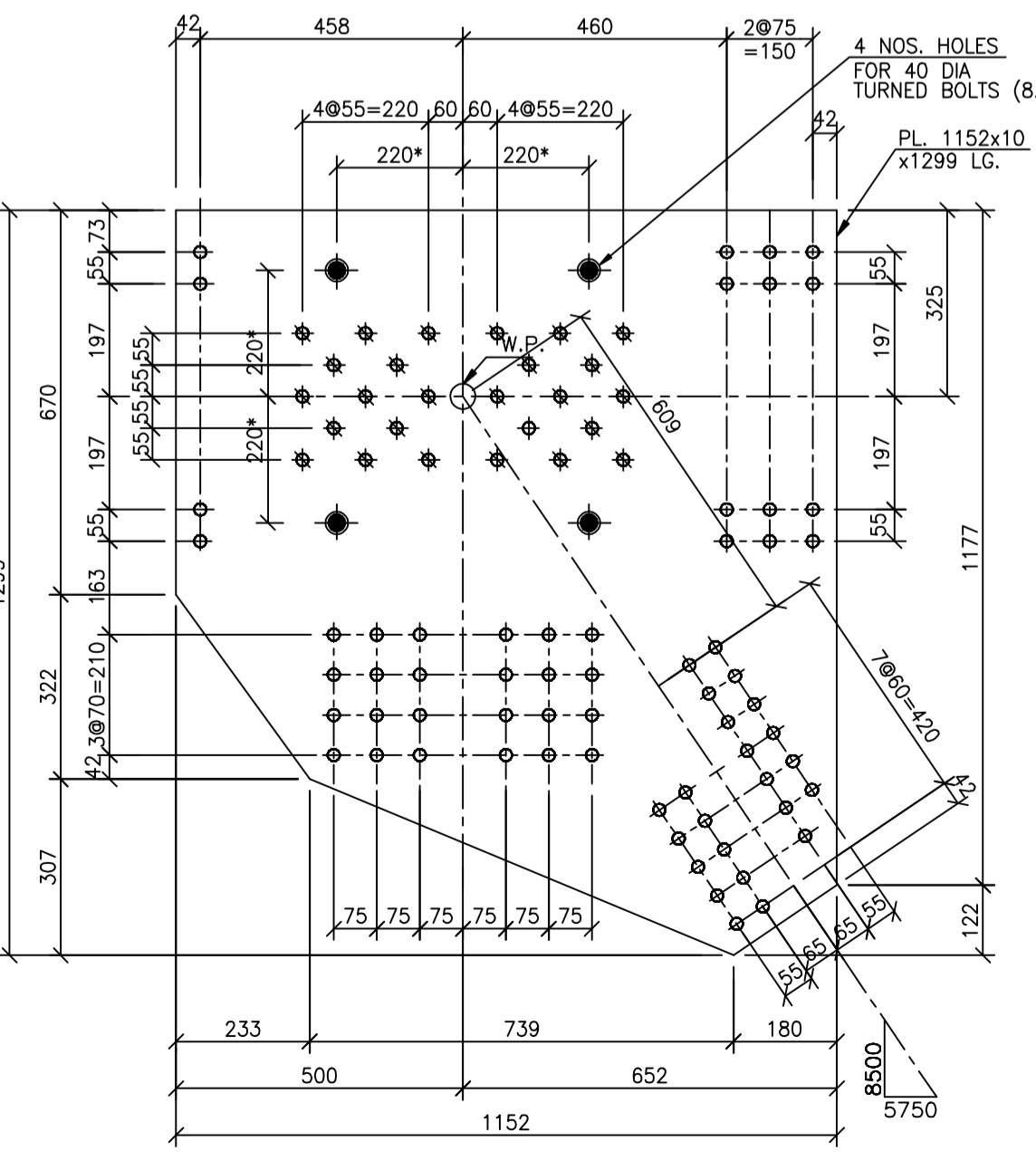


SECTION -G-G

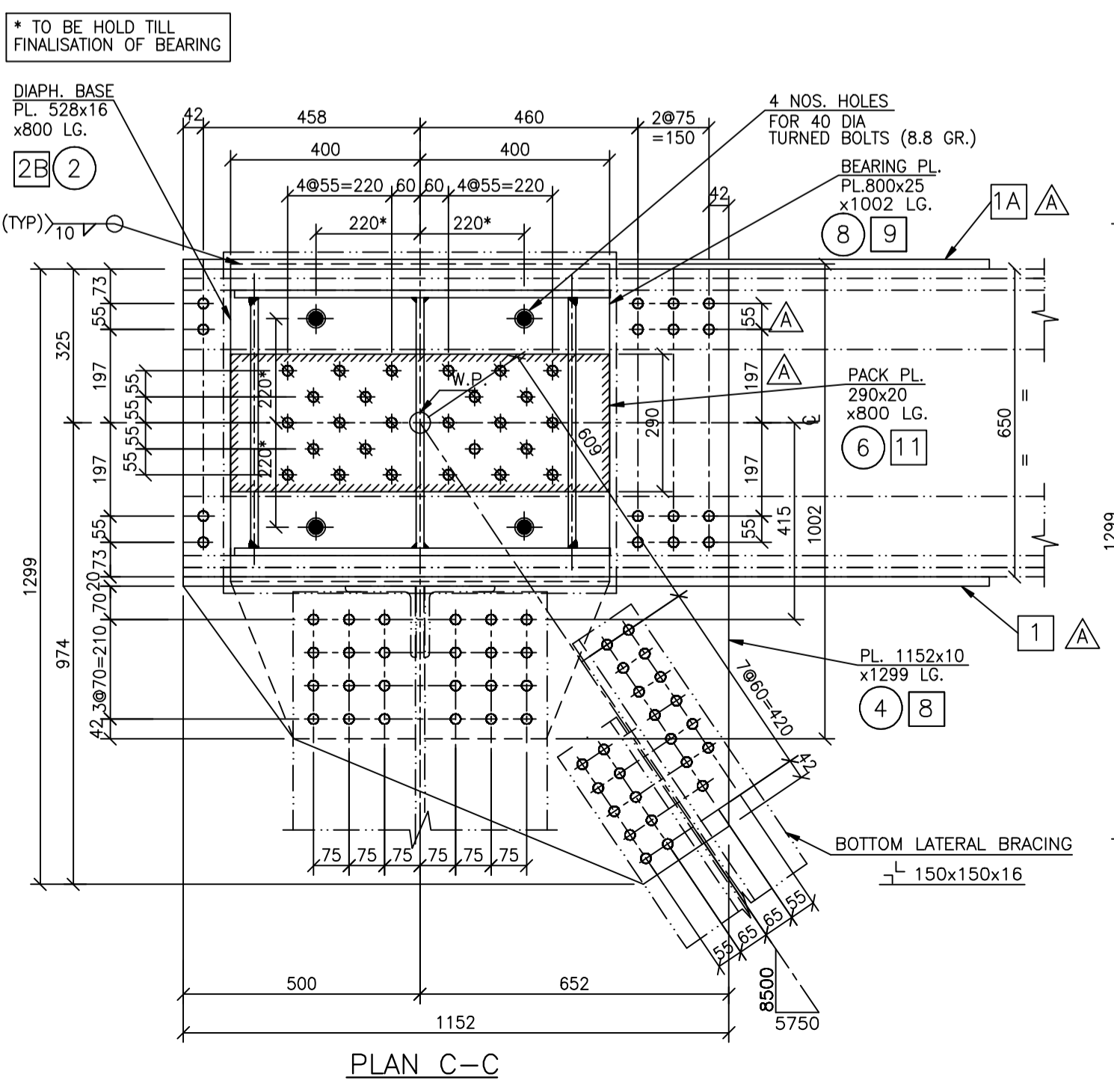
DESCRIPTION	RIVETS	
	SHOP	FIELD
SNAP HEAD	+	⊕
C.S.K. ON FAR SIDE	⊕	⊕
C.S.K. ON NEAR SIDE	⊕	⊕
C.S.K. ON BOTH SIDE	⊕	⊕
ANCHOR BOLTS	⊕	⊕
TURNED BOLTS	⊕	⊕



SECTION B1-B1



DET. OF ITEM MARK 8



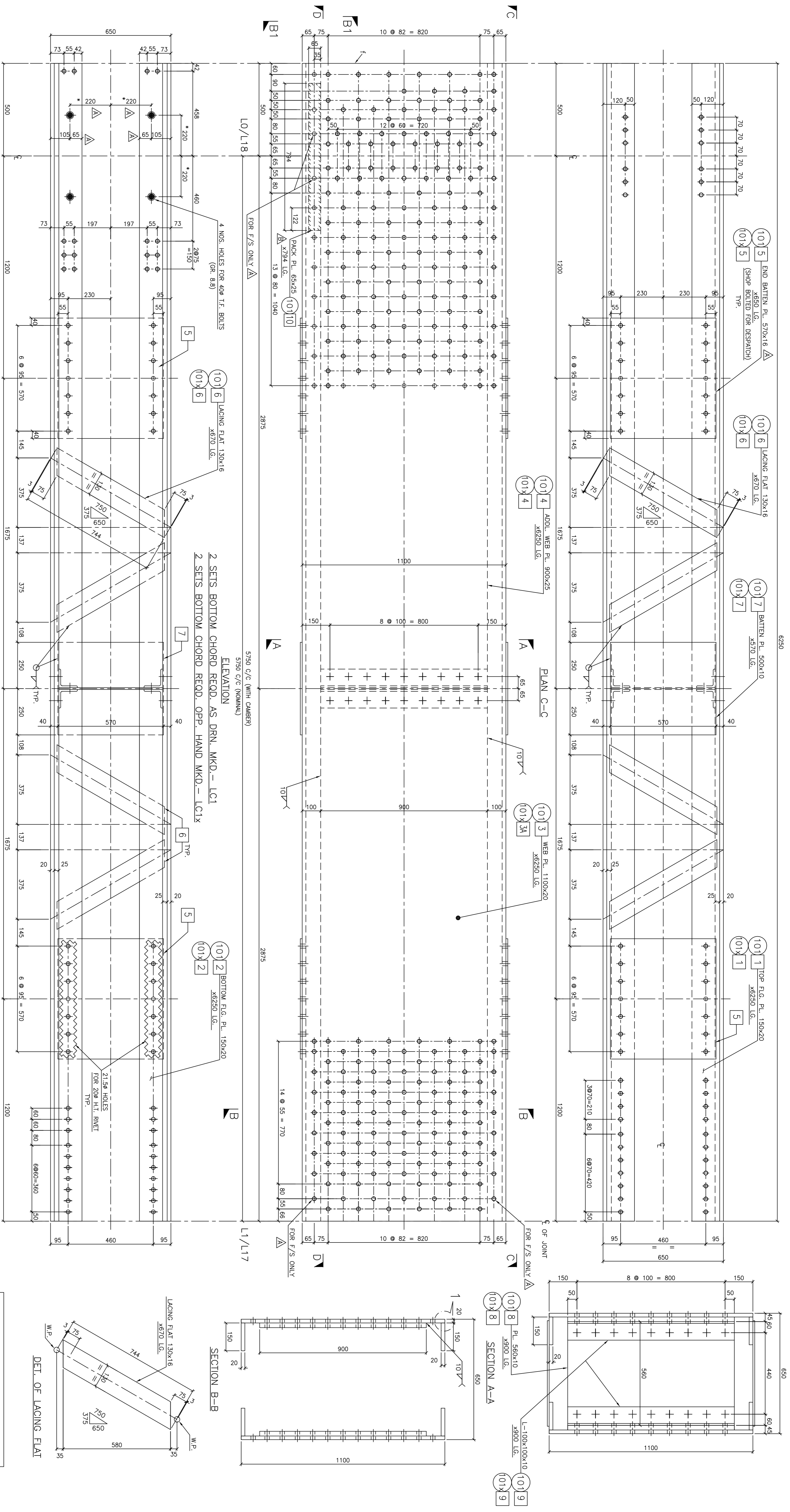
PLAN C-C

- NOTES :-
- ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE NOTED.
  - ALL HOLES ARE 23.5φ FOR 22φ H.T. SITE RIVETS UNLESS OTHERWISE NOTED & SHOWN THUS..... ⊕ & C/SK/FAR SIDE SHOWN THUS ⊕
  - ALL H.T. SHOP RIVETS ARE 20φ IN 21.5φ HOLES & SHOWN THUS..... ⊕
  - ALL WELDS ARE IN 8mm. THK. FILLET CONTINUOUS UNLESS OTHERWISE NOTED
  - ITEM MARK SHOWN THUS..... 1 2
  - PART MARK SHOWN THUS..... 1 2
  - ERECTION MARK SHOWN THUS.....LOA,LOB ETC
  - FOR GENERAL ARRANGEMENT & OTHER NOTES REF. DRG. NO. 9293/E/DD-164-103 R4
  - MACHINED SURFACE SHOWN THUS.....f
  - H.T. RIVETS ARE AS PER IS:1149-1982
  - ALL WELDS ARE AS PER IS: 9595
  - ALL MATERIALS ARE AS PER IS:2062-2011 E410-B0 (QUALITY) EXCEPT ROLLED SECTIONS WHICH ARE E250-B0 (QUALITY)
  - ALL DIMENSIONS ARE TO BE CHECKED AND VERIFIED BY ACTUAL LAYOUT
  - FOR JOINT DETAIL REF. STUP'S DRG. NO. 9293/E/DD-164-401 R1
  - ALL 20φ M.S. BOLTS SHOWN THUS..... ⊕

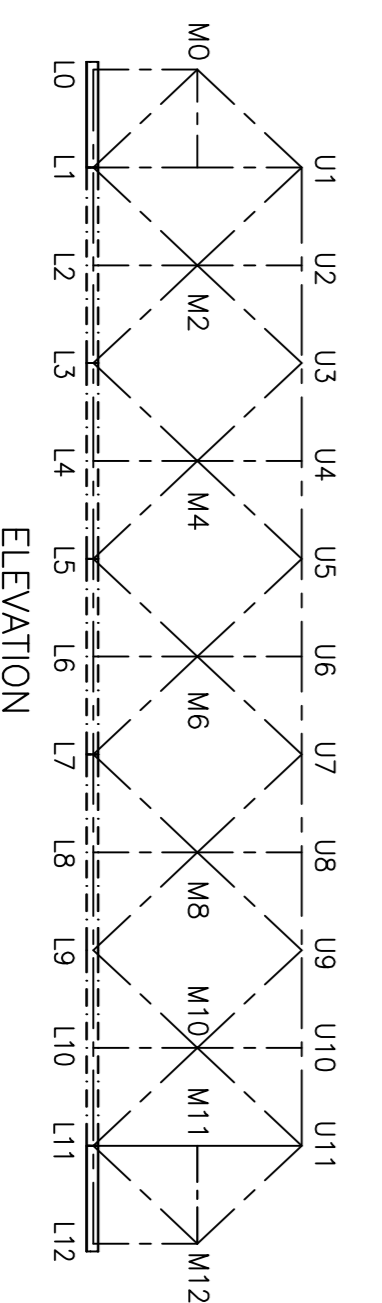
CLIENT :-		<b>N. F. RAILWAY</b>	
		<b>69.0m SPAN WELDED STEEL GIRDER</b>	
CONTRACTOR :-		<b>THE BRAITHWAITE BURN AND JESSOP CONSTRUCTION CO. LTD.</b> (A GOVT. OF INDIA ENTERPRISE)	
PROJECT :-	BRIDGE NO. - 164 (AT KM. 86/996) BETWEEN KHONGSANG AND NONEY UNDER NEW BG RAIL LINE CONSTRUCTION BETWEEN JIRIBAM AND TUPUL (IMPHAL)		
STANDARD OF LOADING - BG- 25T OF 2008			
DETAIL DRG. BY	BBJ		
FABRICATED BY	BBJ		
TITLE :-	DETAILS OF BOTTOM CHORD JOINTS MKD. - LOA, LOB, L12A & L12B		
DRN. BY	K.M.	BBJ'S ORDER NO. - 2140	
CHECK. BY	R.K.	SCALE :-	1:10 & 1:400
APPVD. BY	A.S.	BBJ'S DRG. NO.	2140/69.0m/FAB-17
REV.	DESCRIPTION	PREPARED BY	DATE
A	REVISED AS PER STUP'S COMMENTS	K.M.	31.10.16

REVISION			
REV.	DESCRIPTION	PREPARED BY	DATE
A	REVISED AS PER STUP'S COMMENTS	K.M.	31.10.16





\* TO BE HOLD TILL  
FINALISATION OF BEARING



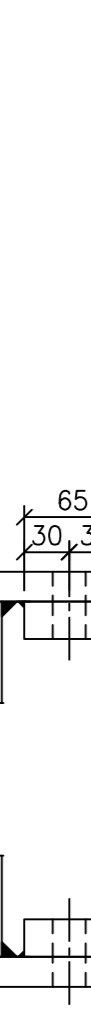
FOR BRAND 130	
ANV/C/JRBM	DY/CE/CON-III/JRBM
JE/CON/DRG/JRBM	JE/CON/JRBM

FOR BRAND 164	
AKEN/C/MPHAL	DY/CE/CON-III/MPHAL
JE/CON/DRG/MPHAL	JE/CON/MPHAL

NOTES :-

1. ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE NOTED.
2. ALL HOLES ARE 23.5ø FOR 22ø H.T. SITE RIVETS UNLESS OTHERWISE NOTED & SHOWN THUS:.....⊕
3. ALL H.T. SHOP RIVETS ARE 20ø IN 21.5ø HOLES SHOWN THUS:.....+
4. ALL WELDS ARE 8mm. THK. FILLET CONTINUOUS UNLESS OTHERWISE NOTED.
5. FOR GENERAL ARRANGEMENT & OTHER NOTES REF. STUP'S DRG. NO. 9293/E/DO-164-103 R4
6. H.T. RIVETS ARE AS PER IS:1149-1982.
7. ALL MATERIALS ARE AS PER IS:2062-2011 E410/B0 (QUALITY) EXCEPT ROLLED SECTIONS WHICH ARE E250-B0 (QUALITY)
8. ALL RIVETS FOR BATTEN CONNECTIONS ARE 20ø H.T. IN 21.5 DIA. HOLES
9. ALL DIMENSIONS ARE TO BE CHECKED AND VERIFIED BY ACTUAL LAYOUT
10. FOR CAMBER DIAGRAM REF. STUP'S DRG. NO. 9293/E/DO-164-400 R0
11. FOR BOTTOM CHORD DETAILS REF. STUP'S DRG. NO. 9372/E/DO-53-325 R1
12. FOR L0 & L1 JOINT REFER BRG'S DRG. NO. 2140/69/0/FAB-17 & FAB-11 RESPECTIVELY.
13. FOR CONNECTION OF CROSS GIRDER AT END & INTERMEDIATE POSITION REF. STUP'S DRG. NO. 9372/E/DO-53-315 R4

DET. - 1  
TOP FLG. PL.  
TO BE GROUND FLASH  
WEB PL.



DESCRIPTION	RIVETS	SHOP FIELD
SHAP HEAD	+	⊕
C.S.K. ON FAR SIDE	⊕	⊕
C.S.K. ON NEAR SIDE	⊕	⊕
C.S.K. ON BOTH SIDE	⊕	⊕
ANCHOR BOLTS	⊕	⊕
TURND BOLTS	⊕	⊕

REV.	DESCRIPTION	DATE	PREPARED BY	K.M.
A	REVISED AS PER STUP'S COMMENTS	12.08.16		
B	REVISED AS PER STUP'S COMMENTS	22.10.16		

**CLIENT :-**  
N. F. RAILWAY

**CONTRACTOR :-**  
THE BRAHTRAWATE BURN AND JESSOP CONSTRUCTION CO. LTD.  
(A GOVT. OF INDIA ENTERPRISE)

**PROJECT :-**  
BRIDGE NO. - 164 (AT KM. 86/996 BETWEEN KHONGSANG AND NONEY UNDER NEW BG RAIL LINE CONSTRUCTION BETWEEN JIRIBAM AND TIPUL (IMPHAL))

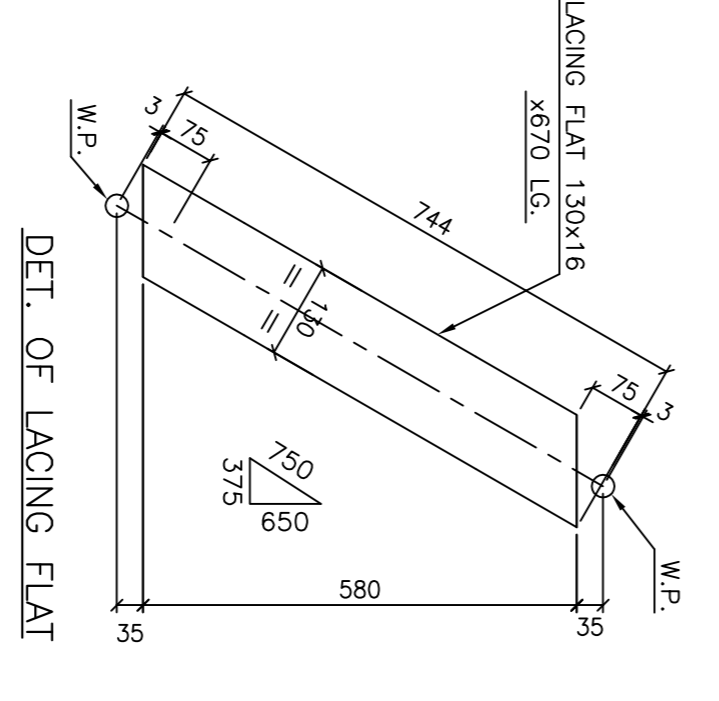
**STANDARD OF LOADING - BG- 25T OF 2008**

**DETAILS OF BOTTOM CHORD MKD. -**  
FABRICATED BY BBU

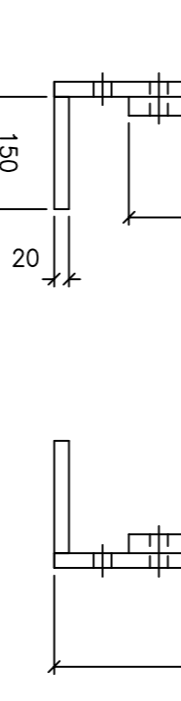
**TITLE :-**  
DETAILS OF BOTTOM CHORD MKD. - LC-1 & LC-1x

**DRN. BY:** K.M. 22.08.16  
**CHECK. BY:** R.K.  
**SCALE :-** 1:10 & 1:400  
**APPVD. BY:** A.S.  
**BBJS DRG. NO.** 2140/69.0m/FAB-18

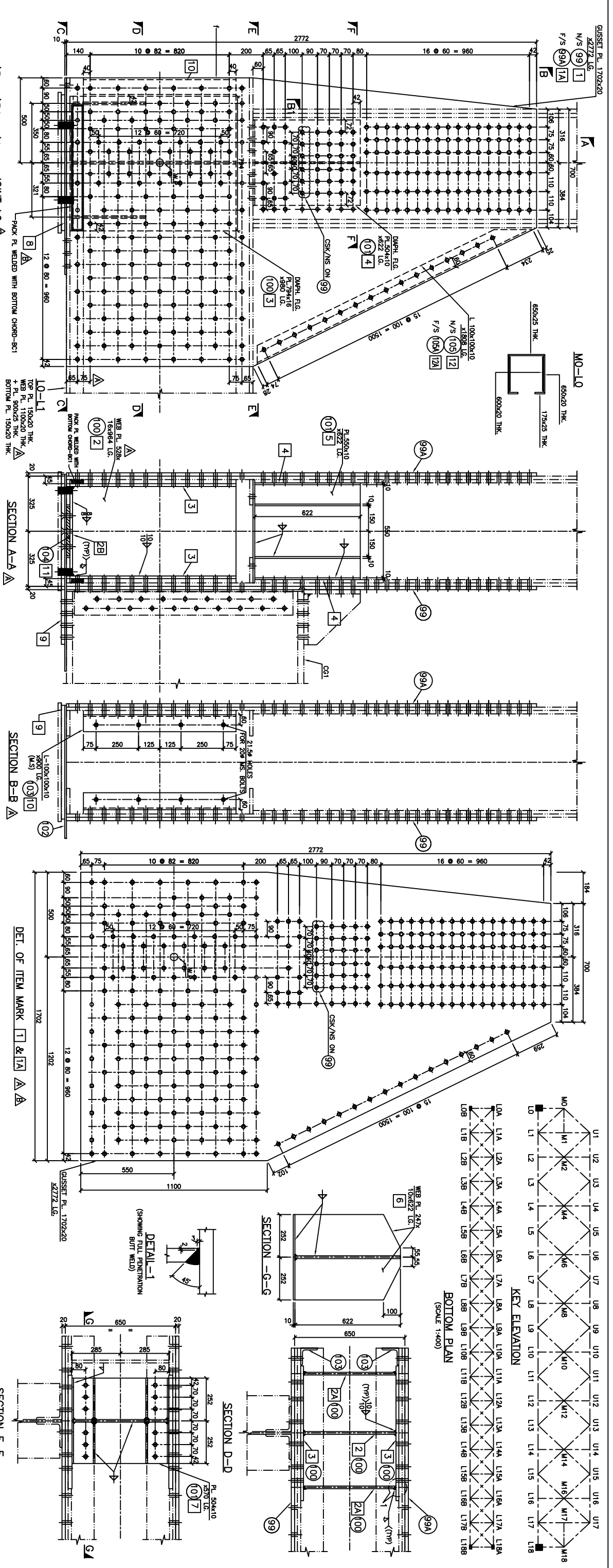
THIS DRAWING IS ALSO VALID FOR BRIDGE NO 130  
(AT KM 69/885) OVER RIVER IRANG



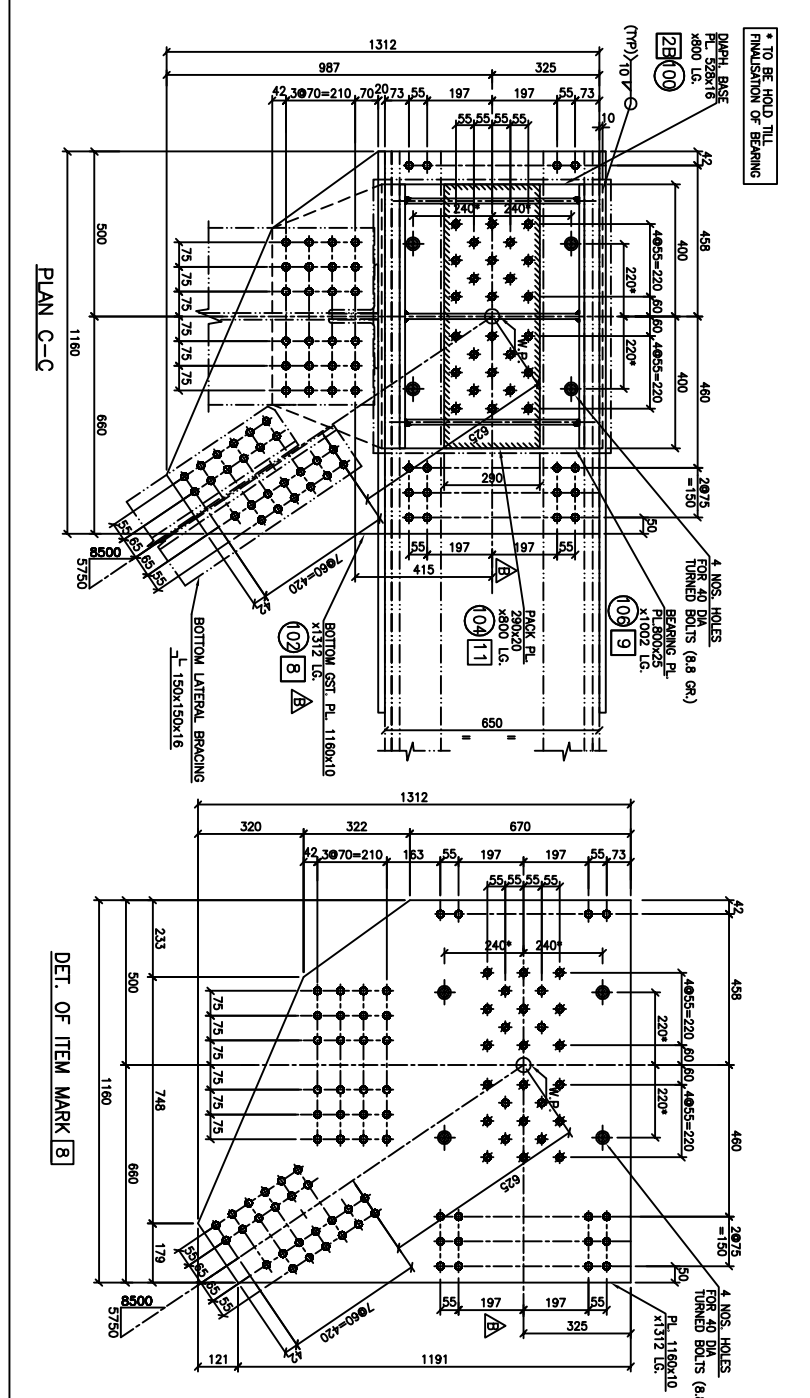
SECTION B-B



SECTION A-A



1 SET BOTTOM CHORD JOINT REOD. AS DRN. MKD. L0A  
 1 SET BOTTOM CHORD JOINT REOD. OPP. HAND TO L0A MKD. L0B  
 1 SET BOTTOM CHORD JOINT REOD. AS DRN. MKD. L18B  
 1 SET BOTTOM CHORD JOINT REOD. OPP. HAND TO L18B MKD. L18A



DESCRIPTION	RIVETS
SHAVE HEAD	+
C.S.K. ON FAR SIDE	⊕
C.S.K. ON NEAR SIDE	⊙
C.S.K. ON BOTH SIDE	⊗
ANCHOR BOLTS	◆
TURNED BOLTS	◆

DESCRIPTION	REVISED AS PER STUP'S COMMENTS	K.M.
A	RIVET HOLES ADDED IN JOINT SPACE	03.12.15
B	REVISIONS AS PER STUP'S COMMENTS	12.02.16

**CLIENT :-** N. F. RAILWAY

**CONTRACTOR :-** THE BAIKHWATE BURN AND JESSOP CONSTRUCTION CO. LTD. (A GOVT. OF INDIA ENTERPRISE)

**PROJECT :-** BRIDGE NO. - 164 (AT KM. 86/996) BETWEEN KHONGSANG AND NONKEY UNDER NEW BG RAIL LINE CONSTRUCTION BETWEEN JIRIBAM AND TUPUL (IMPHAL)

**STANDARD OF LOADING -** BG-25T OF 2008

**DETAIL DRG. BY** BBU

**FABRICATED BY** BBU

**TITLE :-** DETAILS OF BOTTOM CHORD JOINTS MKD. - L0A, L0B, L18A & L18B

**DRN. BY,** K.M.

**CHECK. BY,** R.K.

**SCALE :-** 1:10 & 1:400

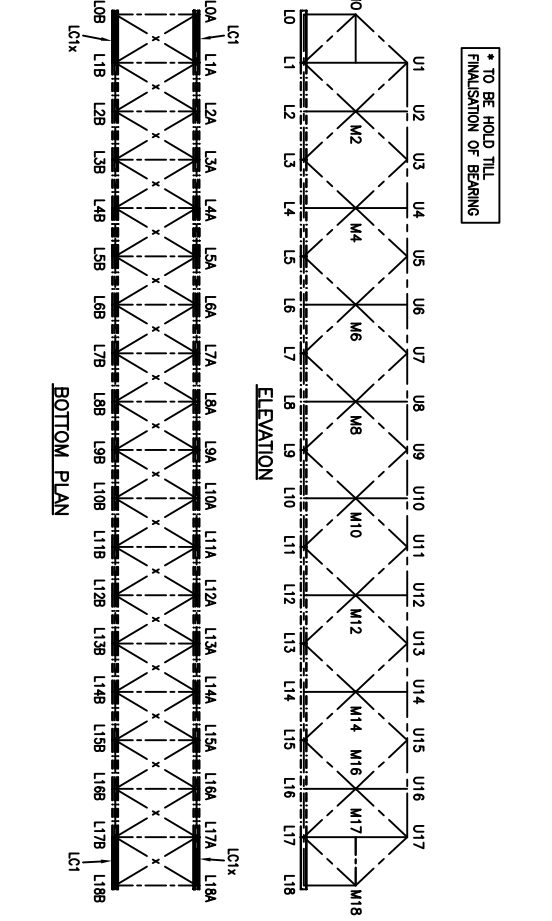
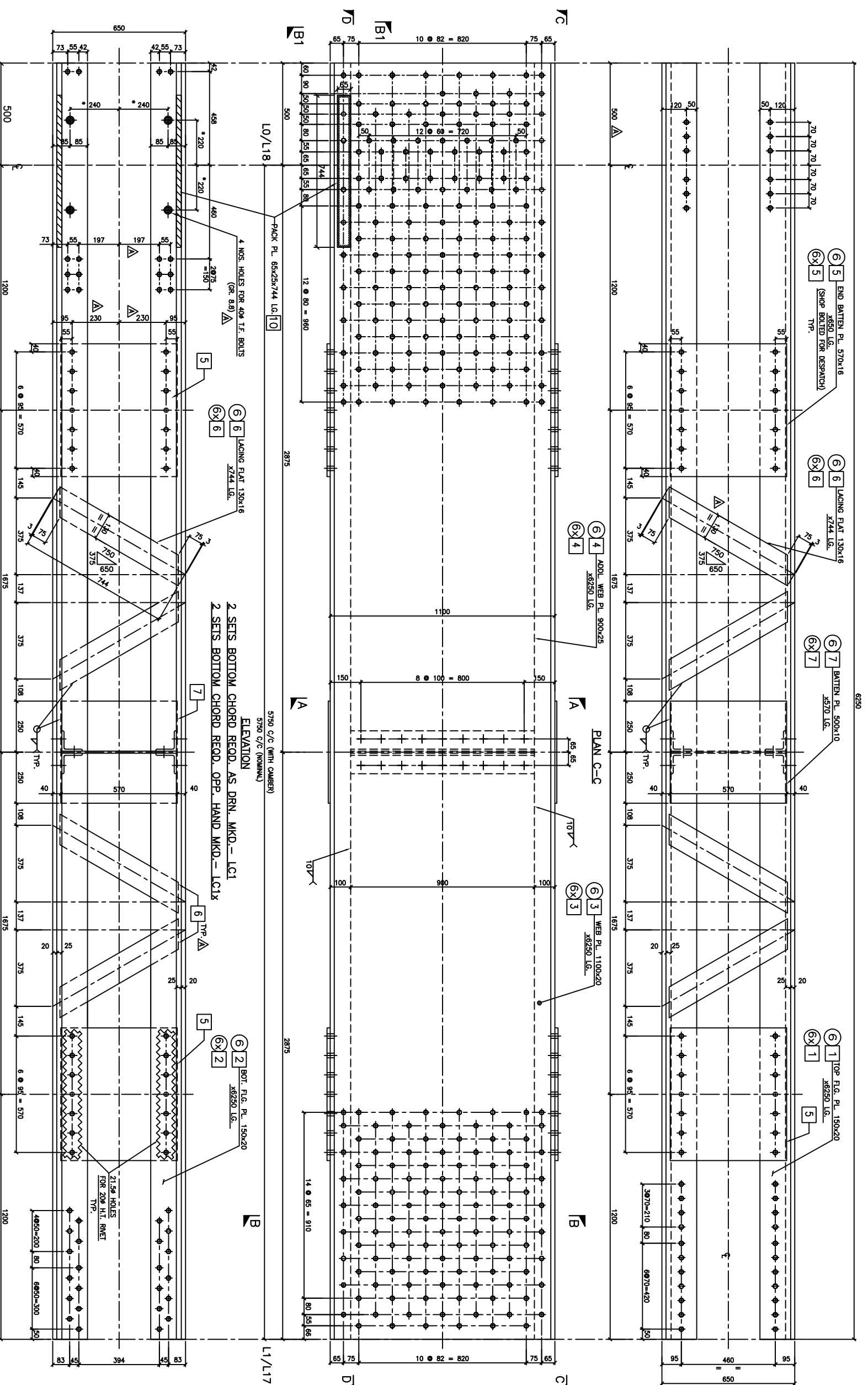
**APVD. BY,** AS

**BBU'S ORDER NO. -** 2140

**BBU'S DRG. NO. -** 2140/103.5m/FAB-04

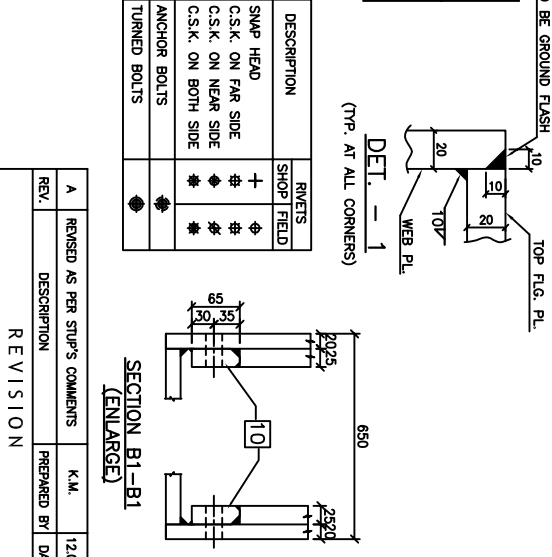
- NOTES :-**
- ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE NOTED.
  - ALL HOLES ARE 23.5# FOR 22# H.T. SITE RIVETS UNLESS OTHERWISE NOTED & SHOWN THUS.....
  - & CSK/FAR SIDE SHOWN THUS.....
  - ALL HIT SHOP RIVETS ARE 20# IN 21.5# HOLES & SHOWN THUS.....
  - ALL WELDS ARE 8mm. THK. FILET CONTINUOUS UNLESS OTHERWISE NOTED
  - ITEM MARK SHOWN THUS.....
  - PART MARK SHOWN THUS.....
  - ERECTOR MARK SHOWN THUS.....
  - FOR GENERAL ARRANGEMENT & OTHER NOTES REF. STUP'S DRG. NO. 9293/F/00-164-102 R4
  - MACHED SURFACE SHOWN THUS.....
  - H.T. RIVETS ARE AS PER IS-1149-1982
  - ALL MATERIALS ARE AS PER IS-2062-2011 E410-B0 (QUALITY) EXCEPT ROLLED SECTIONS WHICH ARE E250-B0 (QUALITY)
  - ALL DIMENSIONS ARE TO BE CHECKED AND VERIFIED BY ACTUAL LAYOUT
  - REF. STUP'S DRG. NO. 9293/F/00-164-301 R1

THIS DRAWING IS ALSO VALID FOR BRIDGE NO 130 (AT KM 69/885) OVER RIVER RAWG



**NOTES** :-

1. ALL DIMENSIONS ARE IN MM, UNLESS OTHERWISE NOTED.
2. ALL HOLES ARE 23.5# FOR 22# H.T. SITE RIVETS UNLESS OTHERWISE NOTED & SHOWN THUS.....
3. ALL H.T. SHOP RIVETS ARE 20# IN 21.5# HOLES SHOWN THUS.....
4. ALL WELDS ARE 8mm. THK. FILET CONTINUOUS UNLESS OTHERWISE NOTED.
5. FOR GENERAL ARRANGEMENT & OTHER NOTES REF. STUP'S DRG. NO. 9293/E/0D-164-102 R4
6. H.T. RIVETS ARE AS PER IS:1149-1982.
7. ALL MATERIALS ARE AS PER IS:2062-2011 E410.B0 (QUALITY) EXCEPT ROLLED SECTIONS WHICH ARE E250-80 (QUALITY)
8. ALL RIVETS FOR BATTEN CONNECTIONS ARE 20# H.T. IN 21.5 DIA. HOLES
9. ALL DIMENSIONS ARE TO BE CHECKED AND VERIFIED BY ACTUAL LAYOUT
10. FOR CAMBER DIAGRAM REF. STUP'S DRG. NO. 9293/E/0D-164-300 R0
11. FOR BOTTOM CHORD DETAILS REF. STUP'S DRG. NO. 9293/E/0D-164-325 R1
12. FOR L0 & L1 JOINT DETAILS REF. STUP'S DRG. NO. 2140/103.5/FAB-04 REV.-B & FAB-05 REV.-B RESPECTIVELY.
13. FOR CONNECTION OF CROSS GIRDER AT END & INTERMEDIATE POSITION REF. STUP'S DRG. NO. 9293/E/0D-164-315 R3



CLIENT :-		N. F. RAILWAY	
CONTRACTOR :-		103.5m SPAN WELDED STEEL GIRDER THE BRAITHWATE BURN AND JESSOP CONSTRUCTION CO. LTD. (A GOVT. OF INDIA ENTERPRISE)	
PROJECT :-		BRIDGE NO. - 164 (AT KM. 86/996) BETWEEN KHONGSANG AND NONEY UNDER NEW BG RAIL LINE CONSTRUCTION BETWEEN JIRIBAM AND TUPUL (IMPHAL)	
STANDARD OF LOADING - BG- 25T OF 2008			
DETAIL DRG. BY		BBJ	
FABRICATED BY		BBJ	
TITLE :-		DETAILS OF BOTTOM CHORD MKD. - LC-1 & LC-1x	
DRN. BY.	K.M.	BBJ	
CHECK. BY.	R.K.	BBJ	
APPVD. BY.	AS	BBJ	
REV.	DESCRIPTION	PREPARED BY	DATE
A	REVISED AS PER STUP'S COMMENTS	K.M.	12.02.16
SCALE :-	1:10 & 1:400	BBJ'S ORDER NO.-	2140
BBJ'S DRG. NO.	2140/103.5m/FAB-55	REV.	A

THIS DRAWING IS ALSO VALID FOR BRIDGE NO 130  
(AT KM 69/885) OVER RIVER IRANG